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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,936	04/24/2008	John Daryl Green	W004 P01258-US	2966

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EXAMINER	
GODENSCHWAGER, PETER F	

ART UNIT	PAPER NUMBER
1796	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/561,936	GREEN ET AL.	
	Examiner	Art Unit	
	PETER F. GODENSCHWAGER	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/22/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 4 is objected to because of the following informalities: "meth (acrylate)" in lines 2-3 appears to be a typo and is being interpreted as "(meth)acrylate". Appropriate correction is required.

Claim 5 is objected to because of the following informalities: The phrase "at least one of styrene vinyl toluene" in line 3 appears to be missing an "or" and is being interpreted as "at least one of styrene or vinyl toluene". Appropriate correction is required.

Claim 6 is objected to because of the following informalities: The word "reactionproduct" in line 3 appears to be a typo and is being interpreted as "reaction product". Appropriate correction is required.

Claim 8 is objected to because of the following informalities: A comma is missing between the species isobutyl methacrylate and t-butyl methacrylate in line 4 of the claim. Appropriate correction is required.

Claim 16 objected to because of the following informalities: There is a degree symbol missing before the Celsius symbol in line 2 of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 7-9, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Patel et al. (US Pat. No. 6,051,252).

Regarding Claim 1: Patel et al. teaches a liquid coating composition comprising a polymeric component (film-forming polymer) (3:30-45) and an ethylenically unsaturated monomer (3:30-45, 4:64-5:5) that dries in the presence of a free radical source (curable to solid state by free radical polymerization) (6:58-65, 10:5-20). The polymeric component is being interpreted as the at least one intumescent ingredient as Applicant has indicated on Pg. 10, Lns. 14-15 of the original specification that the resin (polymeric component) may be a gas source (intumescent ingredient).

Regarding Claims 2-3: Patel et al. further teaches that the polymeric component is polyethyl methacrylate (a thermoplastic resin and methacrylic homopolymer resin) (4:25-45 and 11:10-25).

Regarding Claim 4: Patel et al. further teaches that the polymeric component is a methacrylate copolymer (4:25-40).

Regarding Claims 7 and 8: Patel et al. further teaches that the monomeric component is 2-ethyl hexyl methacrylate (5:14-30).

Regarding Claim 9: Patel et al. teaches that the resin system (polymers and monomeric component) comprise 20-25% by weight of the composition (5% primary polymer, 12% secondary polymer, 8% monomer) (3:30-45).

Regarding Claim 11: Patel et al. teaches that the monomeric component comprises 32% by weight of the resin system (5% primary polymer, 12% secondary polymer, 8% monomer) (3:30-45).

Claims 1, 2, 7, 10, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Leo et al. (US Pat. No. 4,734,333).

Regarding Claims 1 and 2: Leo et al. teaches a liquid composition (solution) comprising a thermoplastic, polymeric component (polycarbonate diol) and a monomeric component (2-hydroxyethyl acrylate, isobornyl acrylate) (1:50-2:15, 5:5-20) that is curable to a solid state by ultraviolet light (radical polymerization) (5:50-65). The polymeric component is being interpreted as the at least one intumescent ingredient as Applicant has indicated on Pg. 10, Lns. 14-15 of the original specification that the resin (polymeric component) may be a gas source (intumescent ingredient).

Regarding Claim 7: Leo et al. teaches the monomeric component is an acrylate (2-hydroxyethyl acrylate, isobornyl acrylate) (5:5-20).

Regarding Claim 10: Leo et al. teaches the polymeric component in 10-40% of the resin (2:5-15).

Regarding Claim 11: Leo et al. teaches the monomeric component in 25-50% (1:50-2:15).

Claims 1-5, 7, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Tobias (US Pat. No. 4,413,037).

Regarding Claim 1: Tobias teaches a liquid composition (solution) comprising a polymeric component and a monomeric component that is curable by free radical polymerization (2:4-10). As the final state of the composition after free radical polymerization is highly solvent and temperature dependent, the composition is deemed capable of being cured into a solid state. The polymeric component is being interpreted as the at least one intumescent ingredient as Applicant has indicated on Pg. 10, Lns. 14-15 of the original specification that the resin (polymeric component) may be a gas source (intumescent ingredient).

Regarding Claims 2-5: Tobias teaches the polymeric component is a copolymer (reaction product) of styrene and hydroxyethyl (meth)acrylate (2-hydroxy ethyl (meth)acrylate) (thermoplastic resin) (1:30-40).

Regarding Claims 7 and 8: Tobias teaches that the monomeric component is methyl acrylate (1:50-65).

Claims 1-3, 6-8, 10 and 11 rejected under 35 U.S.C. 102(b) as being anticipated by Dowbenko et al. (US Pat. No. 3,897,295).

Regarding Claim 1: Dowbenko et al. teaches a free-radical curable, liquid (viscious, roller-coatable) composition, that is curable to a tacky adhesive or film (solid state) comprising a monmeric component and a polymeric component (4:5-10, 4:45-5:3).

Regarding Claims 2 and 3: Dowbenko et al. teaches the polymeric component as a homopolymer of ethyl acrylate (thermoplastic resin) (2:30-55, 3:1-10).

Regarding Claim 6: Dowbenko et al. teaches the composition comprises styrene-butadiene copolymer (styrene-butadiene rubber, reaction product of a diene with styrene).

Regarding Claims 7 and 8: Dowbenko et al. teaches the monomeric component as ethyl acrylate (2:30-55).

Regarding Claims 10 and 11: Dowbenko et al. teaches the composition comprises 2-70 percent by weight polymer and 30-98 percent by weight monomer, overlapping and anticipating the claimed ranges.

Claims 1 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Allen et al. (US Pub. No. 2003/0064232).

Allen et al. teaches a radiation curable (free-radical curable) liquid (able to be applied by dipping) composition comprising a silicone polymer and an acrylate containing monomer that is curable to a elastomer having toughness, tensile strength, and dimensional stability (solid0 ([0001], [0016], [0017], [0090], [0100], [0108]). The polymeric component is being interpreted as the at least one intumescent ingredient as Applicant has indicated on Pg. 10, Lns. 14-15 of the original specification that the resin (polymeric component) may be a gas source (intumescent ingredient).

Claims 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Patel et al. (US Pat. No. 6,051,242).

Regarding Claim 13: Patel teaches a method of drying to a solid (curing) a composition comprising a polymeric component (film-forming polymer) (3:30-45) and an ethylenically unsaturated monomer (3:30-45, 4:64-5:5) comprising the step of adding to the composition a a free radical source (initiator) (6:58-65, 7:15-25, 10:5-20). The polymeric component is being

interpreted as the at least one intumescent ingredient as Applicant has indicated on Pg. 10, Lns. 14-15 of the original specification that the resin (polymeric component) may be a gas source (intumescent ingredient).

Regarding Claims 14 and 15: Patel et al. teaches that the free radical source (initiator) is an organic peroxide such as a ketone peroxide (methyl ethyl ketone peroxides (6:58-67).

Regarding Claim 16: Patel et al. teaches that the composition is dried (cured) in 60-80 seconds at a temperature of 15-25 °C (6:58-67 and 10:5-15).

Regarding Claim 17: The Examiner recognizes that all of the claimed physical properties are not positively taught by the reference, namely that less that 5% by weight of volatile components is lost by evaporation during the conversion of the composition to a solid state. However, the reference teaches all of the claimed ingredients, process steps, and process conditions. Therefore, the claimed properties would inherently be achieved by the method as claimed and disclosed. If it is the applicant's position that this would not be the case: (1) evidence would need to be presented to support applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients, process steps, and process conditions.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al. (US Pub. No. 2003/0064232) in view of Levine (US Pat. No. 5,356,568).

Allen et al. teaches the composition of claim 1 as set forth above.

Allen et al. does not teach the composition further comprising a acid source and a carbon source. However, Levine teaches adding to coating compositions a blowing agent (gas source), a carbonific (carbon source), and ammonium polyphosphate (an acid source) (1:5-15, 2:10-30, 4:48-55). Allen et al. and Levine are analogous art because they are concerned with the same flexible polymeric coatings comprising intumescent ingredients. At the time of the invention, a person of ordinary skill in the art would have been motivated to use the intumescent ingredients of Levine in the composition of Allen et al. and would have been motivated to do so because Levine teaches that they provide a high degree of flame-retardance and heat-resistance (2:1-10). Furthermore, Allen et al. teaches that flame retardants and intumescent agents may be added to the composition ([0092]).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-8 and 12-17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of copending Application No. 11/722,347. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications claim the same liquid intumescent coating composition comprising the same polymeric components and the same monomeric components and the same method of curing the composition. While 11/722,347 further comprises a silicate, the composition of the claims still fully encompasses the instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-9 and 12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim1-20 of copending Application No. 11/722,348. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications claim the same liquid intumescent coating composition comprising the same polymeric components and the same monomeric components. While 11/722,348 further comprises a reinforcement structure, the composition of the claims still fully encompasses the instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER F. GODENSCHWAGER whose telephone number is (571)270-3302. The examiner can normally be reached on Monday-Friday 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/
Supervisory Patent Examiner, Art Unit 1796

/P. F. G./
Examiner, Art Unit 1796
September 8, 2009